

AMENDMENTS TO THE CLAIMS

This Listing of Claims replaces all prior versions, and listings, of claims in this application.

1-16. (Canceled)

17. (Currently Amended) An image processing apparatus, comprising:
a segmenting unit to segment an image into ~~one or more regions of data from the image~~ at least one of a text region, a drawing region, a photograph region, and a background region;

a generating unit to make the one or more regions segmented by the segmenting unit into components;

an encoding unit to encode the components made by the generating unit into code data using different compression methods, the components of the text region, the drawing region, the photograph region, and the background region encoded at different quantization ratios; and

a combining unit to combine the code data encoded by the encoding unit into a codestream.

18. (Previously Presented) The image processing apparatus as claimed in claim 17, wherein the encoding unit divides the image into a plurality of tiles and hierarchically encodes the respective tiles into code data.

19. (Canceled)

20. (Previously Presented) The image processing apparatus as claimed in claim 17, further comprising:

a storing unit to store the codestream combined by the combining unit;

a decoding unit to decode the codestream stored in the storing unit into an image; and

an image forming unit to form the image decoded by the decoding unit.

21-24. (Canceled)

25. (Currently Amended) An image processing method comprising:
segmenting an image into at least one of a text region, a drawing region, a photograph region, and a background region~~one or more regions of data from the image;~~

generating the one or more segmented regions into components;

encoding the components into code data using different compression methods,
the components of the text region, the drawing region, the photograph region, and the background region encoded at different quantization ratios; and

combining the code data into a codestream.

26. (Previously Presented) The image processing method as claimed in claim 25, wherein encoding the components into code data comprises dividing the image into a plurality of tiles and hierarchically encoding the respective tiles into code data.

27. (Canceled)

28. (Previously Presented) The image processing method as claimed in claim 25, further comprising:

storing the codestream;

decoding the stored codestream into an image; and

forming the image generated as a results of decoding the stored codestream.

29. (Currently Amended) An image processing method comprising:

segmenting an image into at least one of a text region, a drawing region, a photograph region, and a background region~~one or more regions of data from the~~ image;

generating the one or more regions into components;

converting the respective components from a first data format to a second data format, where the first and second data formats are different;

encoding the components into code data using a same compression method, the components of the text region, the drawing region, the photograph region, and the background region encoded at different quantization ratios; and

combining the code data into a codestream.

30. (Previously Presented) The image processing apparatus as claimed in claim 29, wherein encoding the components into code data comprises dividing the image into a plurality of tiles and hierarchically encodes the respective tiles into code data.

31. (Canceled)

32. (Previously Presented) The image processing method as claimed in claim 29, further comprising:

storing the codestream;

decoding the stored codestream into an image; and

forming the image that results from decoding the stored codestream.

33. (Currently Amended) A computer-readable medium storing instructions which, when executed by a computer, cause the computer to perform an image processing method comprising:

segmenting an image into at least one of a text region, a drawing region, a photograph region, and a background region~~one or more regions of data from the~~ image;

generating the one or more segmented regions into components;
encoding the components into code data using different compression methods,
the components of the text region, the drawing region, the photograph region, and the
background region encoded at different quantization ratios; and
combining the code data into a codestream.

34. (Previously Presented) The computer-readable medium as claimed in claim 33, wherein encoding the components into code data comprises dividing the image into a plurality of tiles and hierarchically encoding the respective tiles into code data.

35. (Canceled)

36. (Previously Presented) The computer-readable medium as claimed in claim 33, wherein the image processing method further comprises:

storing the codestream;

decoding the stored codestream into an image; and

forming the image generated as a results of decoding the stored codestream.

37-41. (Canceled)

42. (New) The image processing apparatus as claimed in claim 17, further comprising:

a charge unit to subject a region in the one or more regions of data to charge.

43. (New) The image processing apparatus as claimed in claim 17, further comprising:

a converting unit to convert data formats of the text region and the drawing region into binary data and to convert a data format of the photograph region into multi-level data.